6IRV

Bay Control and Breaker Management Unit

Integrated Solution for **Control**, **Monitoring** and **Protection** for **Simple** or **Double Breaker Bays**

Main Functions

Breaker Failure Protection: including Retrip Function, allows to identify breaker failures even without phase currents. It operates for mono or three phase tripping and presents a very fast reset time. The measurement of the six phase currents (for breaker and a half or ring systems) allows to detect failure in two breakers.

Recloser: designed to control one or two breakers. It allows, for this last case, to make sequencial reclosing cycles in a master / slave scheme.

Synchrocheck: apart of the three phase line voltages, the device includes up to three additional voltage analog inputs which allow the synchrocheck function for two breakers in breaker and a half systems without external voltage selectors.

Breaker Supervision: this unit measures and registers the energy of the electric arc for each tripping in each pole. This information allows to ascertain the degree of aging of the breaker and so, to properly program the mainteinance operations.

Open Pole Detector and Pole Discrepancy: allows for the detection of the position of each pole in the breaker and start a tripping if any discrepancy exists for one or two open poles. It can supervise two breakers.

Trip Circuit Supervision: the device can supervise up to 6 breaker's switching circuits for both positions (open or close).

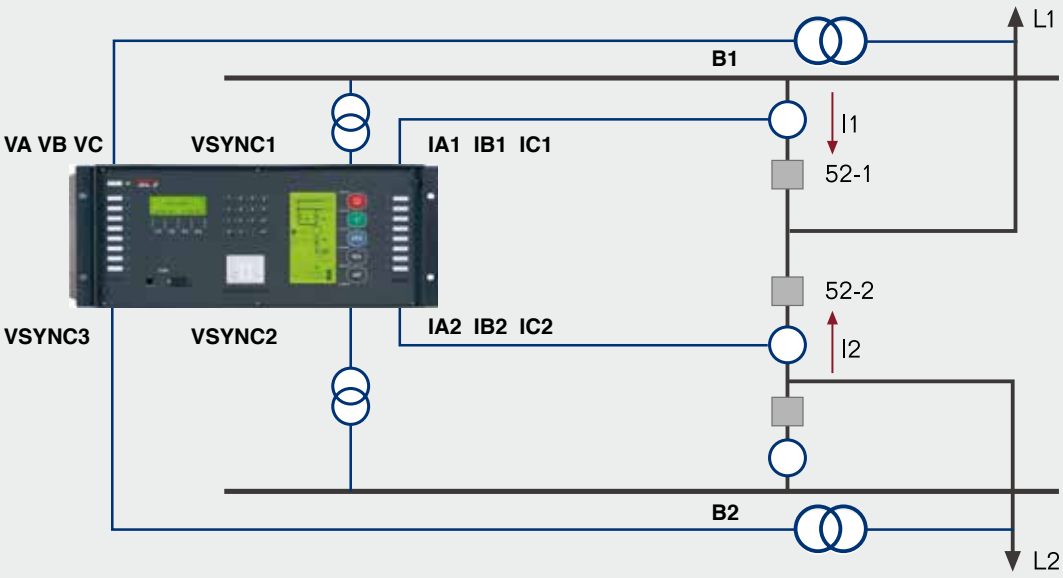
Features

- ✓ VTs and CTs supervision.
- ✓ Oscillographic Recording (32 s/c).
- ✓ Nominal current: 1/5 A.
- ✓ Frequency: 50/60 Hz.
- ✓ Event Recording, Programmable Metering Data Logging and Fault Report.
- ✓ Integrated simulator.
- ✓ Time synchronization (IRIG-B and by protocol).
- ✓ Programmable Logic.
- ✓ Local HMI in the front with a liquid christal that allows the graphical representation of the bay, buttons and associated commands.
- ✓ 16 programmable LEDs.
- ✓ Digital inputs (up to 82).
- ✓ Digital Outputs (up to 44) any of which can be used for tripping.
- ✓ One watchdog output.
- ✓ Local communications port in RS232 and USB.
- ✓ Remote communications ports in RS232, F.O, RS485 and ETHERNET.
- ✓ IEC61850 Standard and DNP3.0 Level II, IEC60870-5 and Modbus protocols.
- ✓ Communications software ZIVERCOMPLUS.

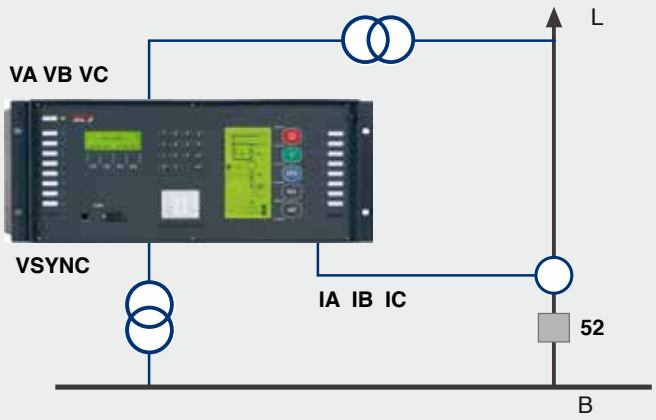
Backup Functions

50/51	Phase O/C (3 units).
50Q/51Q	Negative Sequence O/C (3 units).
50N/51N	Neutral O/C (3 units).
59/27	Phase Over/Under Voltage (3 units).
59N	Neutral Overvoltage (2 units).
81 M/m	Over/Underfrequency (3 units).
81ROC	Frequency Rate of Change (3 units).

Double Breaker Scheme



Single Breaker Scheme



ZIV Automation Headquarters
Parque Tecnológico de Bizkaia, 210 - 48170 Zamudio, Spain. Tel.: +34 944 522 003 Fax.: +34 944 522 140. E-MAIL: ziv@zivautomation.com
Please visit our website for local information in your area www.zivautomation.com